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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/692,569	10/19/2000	Keiji Watanabe	0941.64850	7511

7590 09/13/2004  
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EXAMINER

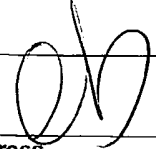
RESAN, STEVAN A

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 09/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/692,569	<b>Applicant(s)</b> WATANABE ET AL.	
	<b>Examiner</b> Stevan A. Resan	<b>Art Unit</b> 1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-19 and 32-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-19 and 32-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 41 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 41 is the same scope as claim 40.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 33, 35-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Stirniman et al US 6589641.

See Col 4 lines 7-10, 33-34, 41-49; Col 5 lines 15-17; Col 6 lines 6-12, 36-37; Col 7 lines 17-20; Col 8 lines 18-23, 44-46; Col 9 lines 28-32, 38-41.

6. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stirniman et al US 6589641 as applied to claim 33 above in view of Nohr et al US 5747550.

Stirniman et al do not disclose the use of far ultraviolet radiation with a half-height width of 15 nm or less.

However Nohr et al teach the use of a wavelength specific sensitizer associated with a reactive species generating photoinitiator and the use of excimer lamps to produce narrow wavelength radiation tuned to the photoinitiator species. (Col 11 lines 1-8,51-61) or to polymerize unsaturated monomers or curing an unsaturated oligomer/monomer mixture(See abstract).

It would have been obvious to one of ordinary skill in the art to include such a sensitizer and to irradiate it as taught by Nohr et al or to use an excimer lamp to irradiate for polymerization or curing in order to more efficiently use the radiation. Note that the presence of a photoinitiator species in the "lubricating layer" is not excluded by the claim language.

7. Claims 16, 18, 19, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stirniman et al US 6589641 in view of Burguette et al US 4705699.

Stirniman et al do not disclose that irradiation should take place in an ambient containing oxygen with a concentration of 10 ppm or less.

However Burguette teaches that photopolymerization of coatings should take place in an oxygen free environment. (Col 13 line 39-41).

Therefore it would have been obvious to one of ordinary skill in the art to irradiate in an oxygen free environment in order to avoid quenching. The other limitations of the claims are taught in Stirniman et al in the places as cited above.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stirniman et al US 6589641 in view of Burguette et al US 4705699 as applied to claim 16 above, and further in view of Nohr et al US 5747550.

Stirniman et al US 6589641 in view of Burguette et al US 4705699 has been discussed above. Stirniman et al do not disclose the use of far ultraviolet radiation with a half-height width of 15 nm or less.

However Nohr et al teach the use of a wavelength specific sensitizer associated with a reactive species generating photoinitiator and the use of excimer lamps to produce narrow wavelength radiation tuned to the photoinitiator species. (Col 11 lines 1-8,51-61) or to polymerize unsaturated monomers or curing an unsaturated oligomer/monomer mixture(See abstract).

It would have been obvious to one of ordinary skill in the art to include such a sensitizer and to irradiate it as taught by Nohr et al or to use an excimer lamp to irradiate for polymerization or curing in order to more efficiently use the radiation. Note that the presence of a photoinitiator species in the "lubricating layer" is not excluded by the claim language.

8. Applicant's arguments with respect to claims 16-19, 32- have been considered but are moot in view of the new ground(s) of rejection.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stevan A. Resan whose telephone number is 571-272-1513. The examiner can normally be reached on Tues-Thurs from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones, can be reached at 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Stevan A. Resan', with a stylized flourish at the end.

Stevan A. Resan  
Primary Examiner  
Art Unit 1773